AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Previously Presented) An interferometer, comprising:

at least a beamsplitter;

at least one end reflector for returning beams; and

a set of reflectors for reflecting the beams between the beamsplitter and the at least one end reflector, said set of reflectors comprises a first and a second angle reflector, constituted by plane reflectors, and said at least one end reflector is a third angle reflector constituted by plane reflectors, and an angle line of the at least one end reflector is arranged perpendicular to an angle line of both of the first and second angle reflector, the first and the second angle reflector being rotatable around an axis.

2. (Previously Presented) An interferometer as set forth in claim 1, wherein each of the angle reflectors is constituted by two plane reflectors, between which is provided an angle of about 72-107 degrees.

3. (Previously Presented) An interferometer as set forth in claim 1, wherein the beamsplitter and the at least one end reflector are mounted on a first rigid structure, and the first and the second angle reflectors are mounted on a second rigid structure which is adapted to be rotatable around an axis.

4. (Previously Presented) An interferometer as set forth in claim 1, wherein said set of reflectors further comprises at least one pair of plane reflectors.

5. (Previously Presented) An interferometer as set forth in claim 4, wherein the pair of plane reflectors is arranged in such a way that the beams, coming from the beamsplitter to the pair of plane reflectors, travel by way of the first and the second angle reflectors and hit the at least one end reflector perpendicularly to the angle line of the at least one end reflector, the beams reflected from the at least one end reflector returning over the same direction but laterally shifted back to the beamsplitter.

6. (Previously Presented) An interferometer as set forth in claim 1, wherein the interferometer is arranged in such a way that

- a beam to be delivered to the interferometer is conductible to the beamsplitter, the beamsplitter being arranged to divide the beam into a first beam and a second beam,
- the first beam is reflected from the beamsplitter to the first angle reflector and further towards the at least one end reflector, and returns from the at least one end reflector over the same direction but laterally shifted back to the beamsplitter,
- the second beam passes through the beamsplitter and advances to the second angle reflector and further towards the at least one end reflector, and returns over the same direction but laterally shifted back to the beamsplitter, and

- the beamsplitter is arranged to combine the first and second beams returning from the at least one end reflector into a single beam.

7. (Previously Presented) An interferometer as set forth in claim 4, wherein the pair of plane reflectors comprises a first and a second plane reflector, and wherein the interferometer is arranged in such a way that

- a beam to be delivered to the interferometer is conductible to the beamsplitter, the beamsplitter being arranged to divide the beam into a first beam and a second beam,
- the first beam is reflected from the beamsplitter to the first plane reflector, from the first plane reflector to the first angle reflector, from the first angle reflector towards the at least one end reflector, and returns from the at least one end reflector over the same direction but laterally shifted back to the beamsplitter,
- the second beam passes through the beamsplitter and advances to the second plane reflector and reflects from the second plane reflector to the second angle reflector, from the second angle reflector towards the at least one end reflector, and returns from the at least one end reflector over the same direction but laterally shifted back to the beamsplitter,
- the beamsplitter is arranged to combine the first and the second beams returning from the at least one end reflector into a single beam.

8. (Previously Presented) An interferometer as set forth in claim 1, wherein at least some of the reflectors are produced by replication.

9. (Previously Presented) An interferometer as set forth in claim 8, wherein the first and the second angle reflectors are comprised of four plane surfaces arranged in one solid body such that a first two of said plane surfaces are perpendicular to each other and a third and a fourth of said plane surfaces are perpendicular to each other, and a reflecting surface is produced to said plane surfaces by replication.

10. (Currently Amended) A method in an interferometer, comprising:

guiding optical beams through use of a first and a second ~~at least two~~ angle reflector**[[**s**]]**, constituted by plane reflectors, by reflecting the optical beams off the first and the second ~~at least two~~ angle reflector**[[**s**]]**; ~~and~~

guiding the optical beams reflected from the first and the second ~~at least two~~ angle reflector**[[**s**]]** through use of at least one end reflector, constituted by plane reflectors, by reflecting the optical beams off the at least one end reflector, and wherein an angle line of the at least one end reflector is perpendicular to an angle line of both of the first and the second ~~at least two~~ angle reflector**[[**s**]]**; and

changing an optical path difference between the optical beams by rotating the first and the second angle reflector around an axis.

11. (Previously Presented) An analyzer, comprising:

an interferometer comprising at least a beamsplitter, at least one end reflector for returning beams, and a set of reflectors for reflecting the beams between the beamsplitter and the at least one end reflector, said set of reflectors comprises a first and a second angle reflector, constituted by plane reflectors, and said at least one

end reflector is a third angle reflector constituted by plane reflectors, and an angle line of the at least one end reflector is arranged perpendicular to an angle line of both of the first and the second angle reflector, the first and the second angle reflector being rotatable around an axis.

12. (Previously Presented) An interferometer as set forth in claim 1, wherein each of the angle reflectors is constituted by two plane reflectors, between which is provided an angle of about 85-95 degrees.

13. (Previously Presented) An interferometer as set forth in claim 1, wherein each of the angle reflectors is constituted by two plane reflectors, between which is provided an angle of about 90 degrees.